

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/563,888A
Source: IFWO
Date Processed by STIC: 7/5/06

ENTERED



IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/563,888A

DATE: 07/05/2006
TIME: 13:54:48

Input Set : A:\SEQLIST.TXT
Output Set: N:\CRF4\07052006\J563888A.raw

4 <110> APPLICANT: Chi-Hong B. Chen
5 Ralf Landgraf
7 <120> TITLE OF INVENTION: APTAMERS TO HUMAN EPIDERMAL GROWTH
8 FACTOR RECEPTOR-3
10 <130> FILE REFERENCE: 30448108USWO
12 <140> CURRENT APPLICATION NUMBER: 10/563,888A
13 <141> CURRENT FILING DATE: 2006-01-09
15 <150> PRIOR APPLICATION NUMBER: 60/488,679
16 <151> PRIOR FILING DATE: 2003-07-18
18 <150> PRIOR APPLICATION NUMBER: PCT/US04/23039
19 <151> PRIOR FILING DATE: 2004-07-16
21 <160> NUMBER OF SEQ ID NOS: 20
23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 4026
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
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33 gatgctgaga accaatacca gacactgtac aagctctacg agaggtgtga ggtggtgatg 180
34 ggaaaccttg agattgtgct cacgggacac aatgccgacc ttccttctt gcagtggatt 240
35 cgagaagtga caggctatgt ctcgtggcc atgaatgaat tctctactt accattgccc 300
36 aacctccgca tggtgcgagg gaccagggtc tacgatggga agtttgcatt cttcgatcatg 360
37 ttgaactata acaccaactc cagccacgct ctgcgccagc tccgcttgcac tcagctcacc 420
38 gagattctgt caggggggtgt ttatatttag aagaacgata agctttgtca catggacaca 480
39 attgacttgg aggacatcgt gaggggaccga gatgctgaga tagtggtgaa ggacaatggc 540
40 agaagctgtc cccccctgtca tgaggtttgc aaggggcgat gctggggtcc tggatcagaa 600
41 gactgccaga cattgaccaa gaccatctgt gtcctcagt gtaatggtca ctgctttggg 660
42 cccaaacccca accagtgtc ccatgatgag tgtgcgggg gctgctcagg ccctcaggac 720
43 acagactgtc ttgcctgccc gcaattcaat gacagtggag cctgtgtacc tcgatgtcca 780
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45 cagttatggag gagtttgtgt agccagctgt cccccataact ttgtggtgaa tcaaaatcc 900
46 tgtgtcaggc cctgtctcc tgacaagatg gaagtagata aaaatgggtt caagatgtgt 960
47 gaggcttgg gggactatg tcccaaagcc tgtgagggaa caggctctgg gagccgcttc 1020
48 cagactgtgg actcgagcaa cattgatgga tttgtgaact gcaccaagat cctggcaac 1080
49 ctggactttc tgatcaccgg cctcaatggc gaccctggc acaagatccc tgccctggac 1140
50 ccagagaagc tcaatgtctt cggacagta cgggagatca caggttaccc gaacatccag 1200
51 tcctggccgc cccacatgca caacttcgt gtttttcca atttgacaac cattggaggc 1260
52 agaaggctct acaaccgggg ctttcattt tgatcatga agaacttggaa tgtcacatct 1320
53 ctgggcttcc gatccctgaa gggaaatttagt gctggcgta tctatataag tgccaaatagg 1380
54 cagctctgtc accaccactc ttgaaactgg accaagggtgc ttccggggcc tacgaaagag 1440
55 cgactagaca tcaagcataa tcggccgccc agagactgctg tggcagaggg caaagtgtgt 1500

R. b

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56 gaccactgt gtcctctgg gggatgctgg ggcccaggcc ctggtcagtg cttgtctgt 1560
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 58 cgagaatttg cccatgaggc cgaatgcttc tcctgcacc cggaaatgcca acccatgggg 1680
 59 ggcactgcca catcaatgg ctgggctct gatacttgtg ctaatgtgc ccatttgcg 1740
 60 gatggggccc actgtgttag cagctgcccc catggagtc taggtgccaa gggcccaatc 1800
 61 tacaagtacc cagatgttca gaatgaatgt cggccctgccc atgagaactg caccagggg 1860
 62 tgtaaaggac cagagttca agactgttta ggacaaacac tggctgtat cggaaaacc 1920
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 64 ggcactttc tctactggcg tggcgccgg attcagaata aaagggttat gaggcgatac 2040
 65 ttggAACGGG gtgagagcat agagcctctg gaccccagtg agaaggctaa caaagtctt 2100
 66 gccagaatct tcaaagagac agagctaagg aagcttaaag tgctggctc ggggtctt 2160
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 68 attaaagtca ttgaggacaa gagtgacgg cagatttc aagctgtac agatcatatg 2280
 69 ctggccattg gcagccttgg ccatgcccac attgttaaggc tgctggact atgcccagg 2340
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 72 ggaatgtact accttgagga acatggatgc tgcatagaa acctggctgc cggaaacgtg 2520
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 81 gaggaaagtag agctggagcc agaactagac cttagacccatg acttggaaagc agaggaggac 3060
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 100 <210> SEQ ID NO: 2
 101 <211> LENGTH: 1342
 102 <212> TYPE: PRT
 103 <213> ORGANISM: Homo sapiens
 105 <400> SEQUENCE: 2
 106 Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu

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107	1	5	10	15												
108	Ala	Arg	Gly	Ser	Glu	Val	Gly	Asn	Ser	Gln	Ala	Val	Cys	Pro	Gly	Thr
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110	Leu	Asn	Gly	Leu	Ser	Val	Thr	Gly	Asp	Ala	Glu	Asn	Gln	Tyr	Gln	Thr
111							35			40					45	
112	Leu	Tyr	Lys	Leu	Tyr	Glu	Arg	Cys	Glu	Val	Val	Met	Gly	Asn	Leu	Glu
113							50			55					60	
114	Ile	Val	Leu	Thr	Gly	His	Asn	Ala	Asp	Leu	Ser	Phe	Leu	Gln	Trp	Ile
115							65			70			75		80	
116	Arg	Glu	Val	Thr	Gly	Tyr	Val	Leu	Val	Ala	Met	Asn	Glu	Phe	Ser	Thr
117								85			90				95	
118	Leu	Pro	Leu	Pro	Asn	Leu	Arg	Val	Val	Arg	Gly	Thr	Gln	Val	Tyr	Asp
119							100			105					110	
120	Gly	Lys	Phe	Ala	Ile	Phe	Val	Met	Leu	Asn	Tyr	Asn	Thr	Asn	Ser	Ser
121							115			120					125	
122	His	Ala	Leu	Arg	Gln	Leu	Arg	Leu	Thr	Gln	Leu	Thr	Glu	Ile	Leu	Ser
123							130			135					140	
124	Gly	Gly	Val	Tyr	Ile	Glu	Lys	Asn	Asp	Lys	Leu	Cys	His	Met	Asp	Thr
125							145			150			155		160	
126	Ile	Asp	Trp	Arg	Asp	Ile	Val	Arg	Asp	Arg	Asp	Ala	Glu	Ile	Val	Val
127								165			170				175	
128	Lys	Asp	Asn	Gly	Arg	Ser	Cys	Pro	Pro	Cys	His	Glu	Val	Cys	Lys	Gly
129								180			185				190	
130	Arg	Cys	Trp	Gly	Pro	Gly	Ser	Glu	Asp	Cys	Gln	Thr	Leu	Thr	Lys	Thr
131								195			200				205	
132	Ile	Cys	Ala	Pro	Gln	Cys	Asn	Gly	His	Cys	Phe	Gly	Pro	Asn	Pro	Asn
133								210			215				220	
134	Gln	Cys	Cys	His	Asp	Glu	Cys	Ala	Gly	Gly	Cys	Ser	Gly	Pro	Gln	Asp
135							225			230			235		240	
136	Thr	Asp	Cys	Phe	Ala	Cys	Arg	His	Phe	Asn	Asp	Ser	Gly	Ala	Cys	Val
137								245			250				255	
138	Pro	Arg	Cys	Pro	Gln	Pro	Leu	Val	Tyr	Asn	Lys	Leu	Thr	Phe	Gln	Leu
139								260			265				270	
140	Glu	Pro	Asn	Pro	His	Thr	Lys	Tyr	Gln	Tyr	Gly	Gly	Val	Cys	Val	Ala
141								275			280				285	
142	Ser	Cys	Pro	His	Asn	Phe	Val	Val	Asp	Gln	Thr	Ser	Cys	Val	Arg	Ala
143								290			295				300	
144	Cys	Pro	Pro	Asp	Lys	Met	Glu	Val	Asp	Lys	Asn	Gly	Leu	Lys	Met	Cys
145							305			310			315		320	
146	Glu	Pro	Cys	Gly	Gly	Leu	Cys	Pro	Lys	Ala	Cys	Glu	Gly	Thr	Gly	Ser
147								325			330				335	
148	Gly	Ser	Arg	Phe	Gln	Thr	Val	Asp	Ser	Ser	Asn	Ile	Asp	Gly	Phe	Val
149								340			345				350	
150	Asn	Cys	Thr	Lys	Ile	Leu	Gly	Asn	Leu	Asp	Phe	Leu	Ile	Thr	Gly	Leu
151								355			360				365	
152	Asn	Gly	Asp	Pro	Trp	His	Lys	Ile	Pro	Ala	Leu	Asp	Pro	Glu	Lys	Leu
153								370			375				380	
154	Asn	Val	Phe	Arg	Thr	Val	Arg	Glu	Ile	Thr	Gly	Tyr	Leu	Asn	Ile	Gln
155								385			390				395	
															400	

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156 Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr
157 405 410 415
158 Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile
159 420 425 430
160 Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu
161 435 440 445
162 Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn Arg Gln Leu Cys Tyr
163 450 455 460
164 His His Ser Leu Asn Trp Thr Lys Val Leu Arg Gly Pro Thr Glu Glu
165 465 470 475 480
166 Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
167 485 490 495
168 Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly Gly Cys Trp Gly Pro
169 500 505 510
170 Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val
171 515 520 525
172 Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala
173 530 535 540
174 His Glu Ala Glu Cys Phe Ser Cys His Pro Glu Cys Gln Pro Met Gly
175 545 550 555 560
176 Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp Thr Cys Ala Gln Cys
177 565 570 575
178 Ala His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro His Gly
179 580 585 590
180 Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Val Gln Asn
181 595 600 605
182 Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro
183 610 615 620
184 Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Val Leu Ile Gly Lys Thr
185 625 630 635 640
186 His Leu Thr Met Ala Leu Thr Val Ile Ala Gly Leu Val Val Ile Phe
187 645 650 655
188 Met Met Leu Gly Gly Thr Phe Leu Tyr Trp Arg Gly Arg Arg Ile Gln
189 660 665 670
190 Asn Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg Gly Glu Ser Ile Glu
191 675 680 685
192 Pro Leu Asp Pro Ser Glu Lys Ala Asn Lys Val Leu Ala Arg Ile Phe
193 690 695 700
194 Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu Gly Ser Gly Val Phe
195 705 710 715 720
196 Gly Thr Val His Lys Gly Val Trp Ile Pro Glu Gly Glu Ser Ile Lys
197 725 730 735
198 Ile Pro Val Cys Ile Lys Val Ile Glu Asp Lys Ser Gly Arg Gln Ser
199 740 745 750
200 Phe Gln Ala Val Thr Asp His Met Leu Ala Ile Gly Ser Leu Asp His
201 755 760 765
202 Ala His Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln
203 770 775 780
204 Leu Val Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Arg

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207					805					810					815	
208	Gln	Ile	Ala	Lys	Gly	Met	Tyr	Tyr	Leu	Glu	Glu	His	Gly	Met	Val	His
209						820				825					830	
210	Arg	Asn	Leu	Ala	Ala	Arg	Asn	Val	Leu	Leu	Lys	Ser	Pro	Ser	Gln	Val
211						835			840					845		
212	Gln	Val	Ala	Asp	Phe	Gly	Val	Ala	Asp	Leu	Leu	Pro	Pro	Asp	Asp	Lys
213						850			855			860				
214	Gln	Leu	Leu	Tyr	Ser	Glu	Ala	Lys	Thr	Pro	Ile	Lys	Trp	Met	Ala	Leu
215						865			870			875			880	
216	Glu	Ser	Ile	His	Phe	Gly	Lys	Tyr	Thr	His	Gln	Ser	Asp	Val	Trp	Ser
217						885				890					895	
218	Tyr	Gly	Val	Thr	Val	Trp	Glu	Leu	Met	Thr	Phe	Gly	Ala	Glu	Pro	Tyr
219						900			905					910		
220	Ala	Gly	Leu	Arg	Leu	Ala	Glu	Val	Pro	Asp	Leu	Leu	Glu	Lys	Gly	Glu
221						915			920			925				
222	Arg	Leu	Ala	Gln	Pro	Gln	Ile	Cys	Thr	Ile	Asp	Val	Tyr	Met	Val	Met
223						930			935			940				
224	Val	Lys	Cys	Trp	Met	Ile	Asp	Glu	Asn	Ile	Arg	Pro	Thr	Phe	Lys	Glu
225						945			950			955			960	
226	Leu	Ala	Asn	Glu	Phe	Thr	Arg	Met	Ala	Arg	Asp	Pro	Pro	Arg	Tyr	Leu
227						965			970			975				
228	Val	Ile	Lys	Arg	Glu	Ser	Gly	Pro	Gly	Ile	Ala	Pro	Gly	Pro	Glu	Pro
229						980			985			990				
230	His	Gly	Leu	Thr	Asn	Lys	Lys	Leu	Glu	Glu	Val	Glu	Leu	Glu	Pro	Glu
231						995			1000			1005				
232	Leu	Asp	Leu	Asp	Leu	Asp	Leu	Glu	Ala	Glu	Glu	Asp	Asn	Leu	Ala	Thr
233						1010			1015			1020				
234	Thr	Thr	Leu	Gly	Ser	Ala	Leu	Ser	Leu	Pro	Val	Gly	Thr	Leu	Asn	Arg
235						1025			1030			1035			1040	
236	Pro	Arg	Gly	Ser	Gln	Ser	Leu	Leu	Ser	Pro	Ser	Ser	Gly	Tyr	Met	Pro
237						1045				1050			1055			
238	Met	Asn	Gln	Gly	Asn	Leu	Gly	Gly	Ser	Cys	Gln	Glu	Ser	Ala	Val	Ser
239						1060			1065			1070				
240	Gly	Ser	Ser	Glu	Arg	Cys	Pro	Arg	Pro	Val	Ser	Leu	His	Pro	Met	Pro
241						1075			1080			1085				
242	Arg	Gly	Cys	Leu	Ala	Ser	Glu	Ser	Ser	Glu	Gly	His	Val	Thr	Gly	Ser
243						1090			1095			1100				
244	Glu	Ala	Glu	Leu	Gln	Glu	Lys	Val	Ser	Met	Cys	Arg	Ser	Arg	Ser	Arg
245						1105			1110			1115			1120	
246	Ser	Arg	Ser	Pro	Arg	Pro	Arg	Gly	Asp	Ser	Ala	Tyr	His	Ser	Gln	Arg
247						1125				1130			1135			
248	His	Ser	Leu	Leu	Thr	Pro	Val	Thr	Pro	Leu	Ser	Pro	Pro	Gly	Leu	Glu
249						1140			1145			1150				
250	Glu	Glu	Asp	Val	Asn	Gly	Tyr	Val	Met	Pro	Asp	Thr	His	Leu	Lys	Gly
251						1155			1160			1165				
252	Thr	Pro	Ser	Ser	Arg	Glu	Gly	Thr	Leu	Ser	Ser	Val	Gly	Leu	Ser	Ser
253						1170			1175			1180				

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54
Seq#:14; N Pos. 55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74
Seq#:14; N Pos. 75,76,77,78,79,80,81,82,83

VERIFICATION SUMMARY

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L:727 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:731 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
L:732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14